Listing of Claims:

Claim 1. (currently amended): A projection optical system which ~~projects luminous flux from an image forming element which forms~~ provides a final image of an original image formed by an image forming element on a final image plane ~~onto a projection surface which is oblique to a central principal ray which is a principal ray of luminous flux traveling from the center of the original image to the center of a finally formed image formed on the projection surface~~, the projection optical system comprising:

a plurality of reflecting surfaces, each of the surfaces having a curvature,

wherein a central principal ray, which is a principal ray of luminous flux traveling from a center of the original image to a center of the final image, enters obliquely on the final image plane, and

the projection optical system forms an intermediate image of the original image between the original image and the final image in a path of the central principal ray, and

a final pupil plane, which is closest to the final image plane of a plurality of pupil planes being between the original image and the final image, is arranged on the original image side with respect to a final reflecting surface, which is closest to the final image plane of the plurality of reflecting surfaces, and

the following expression is satisfied:

$$0 < (S0 \times |\beta|)/S1 < 8$$

where S0 represents a length of a path of the central principal ray from the final pupil plane ~~a pupil surface closest to the projection surface~~ to [[a]] the final reflecting surface ~~closest to the projection surface of the plurality of reflecting surfaces~~, S1 represents a length of a path of the central principal ray from the final pupil plane ~~pupil surface~~ to the final image plane

~~projection surface~~, and β represents a magnification of the final image with respect to the original image in a plane including a normal to the final image plane and the central principal ray entering on the final image plane ~~in an oblique projection direction~~.

Claim 2. (original): The projection optical system according to claim 1, wherein further the following expression is satisfied:

$$0 < (S0 \times |\beta|)/S1 < 5.$$

Claim 3. (original): The projection optical system according to claim 1, wherein the reflecting surfaces are rotationally asymmetric surfaces.

Claim 4. (canceled).

Claim 5. (original): The projection optical system according to claim 1, further comprising:

at least one optical element having a refractive power.

Claim 6. (currently amended): A projection optical system which ~~projects luminous flux from an image forming element which forms~~ provides a final image of an original image formed by an image forming element on a final image plane ~~onto a projection surface which is oblique to a central principal ray traveling from the center of the original image to the center of a finally formed image formed on the projection surface~~, the projection optical system comprising:

a plurality of reflecting surfaces, each of the surfaces having a curvature; and

an aperture stop ~~which is disposed closer to the image forming element than to a final reflecting surface closest to the projection surface of the plurality of reflecting surfaces~~ wherein a

central principal ray, which is a principal ray of luminous flux traveling from a center of the original image to a center of the final image, enters obliquely on the final image plane, and

the projection optical system forma an intermediate image of the original image between the original image and the final image in a path of the central principal ray, and

the aperture stop is disposed closer to the image forming element than a final reflecting surface closest to the final image plane of the plurality of reflecting surfaces and~~,wherein~~ an image of the aperture stop is formed between the aperture stop and the final reflecting surface.

Claim 7. (original): The projection optical system according to claim 6, wherein the reflecting surfaces are rotationally asymmetric surfaces.

Claim 8. (original): The projection optical system according to claim 6, further comprising: at least one optical element having a refractive power.

Claim 9. (currently amended): The projection optical system according to claim 6, wherein, among the plurality of reflecting surfaces, at least one of reflecting surfaces through which luminous flux from the position where ~~a pupil image~~ the image of the aperture stop is formed in the projection optical system to the ~~projection surface~~ final image plane passes has a negative optical power.

Claim 10. (currently amended): The projection optical system according to claim 6, wherein, among the plurality of reflecting surfaces, a first reflecting surface counting from the position where the image of the aperture stop is formed toward the image forming element has a positive optical power, and a first reflecting surface counting from the position where the image of the aperture stop is formed toward the final image plane ~~projection surface~~ has a negative optical power.

Claim 11. (currently amended): The projection optical system according to claim 6, wherein a normal line to the image forming element substantially forms an angle of 90 degrees with a normal line to the final image plane ~~projection surface~~.

Claim 12. (original): A projection type image display apparatus comprising:

an image forming element which forms an original image; and

the projection optical system according to claim 1.

Claim 13. (currently amended): The projection type image display apparatus according to claim 12, further comprising a plane reflecting surface on an optical path from the projection optical system to ~~the projection surface~~ the final image plane.

Claim 14. (original): A projection type image display apparatus comprising:

an image forming element which forms an original image; and

the projection optical system according to claim 6.

Claim 15. (currently amended): The projection type image display apparatus according to claim 14, further comprising a plane reflecting surface on an optical path from the projection optical system to the final image plane ~~projection surface~~.

Claim 16. (currently amended): An image display system comprising:

the projection type image display apparatus according to claim 12 ~~or 14~~; and

an image information supply apparatus which supplies image information for displaying an original image on the image forming element to the projection type image display apparatus.

Claim 17. (new): An image display system comprising:

the projection type image display apparatus according to claim 14; and

an image information supply apparatus which supplies image information for displaying an original image on the image forming element to the projection type image display apparatus.

Claim 18. (new): A projection optical system which provides a final image of an original image formed by an image forming element on a final image plane, the projection optical system comprising: an aperture stop,

wherein a central principal ray, which is a principal ray of luminous flux traveling from the center of the original image to the center of the final image, enters obliquely on the final image plane,

the projection optical system forms an intermediate image of the original image between the original image and the final image in a path of the central principal ray, and

the aperture stop is disposed closer to the image forming element than a final reflecting surface closest to the final image plane of a plurality of reflecting surfaces and an image of the aperture stop is formed between the aperture stop and the final reflecting surface.

Claim 19. (new): A projection type image display apparatus comprising:

an image forming element which forms an original image; and

the projection optical system according to claim 18.

Claim 20. (new): An image display system comprising:

the projection type image display apparatus according to claim 19; and

an image information supply apparatus which supplies image information for displaying an original image on the image forming element to the projection type image display apparatus.